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10/540,006	11/14/2006	George Grech	4623C-083/NPB	6670
27572	7590	07/08/2010		
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EXAMINER				
YOUNKINS, KAREN L				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/540,006

**Applicant(s)**

GRECH ET AL.

**Examiner**

KAREN YOUNKINS

**Art Unit**

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.55-61 and 78-80 is/are pending in the application.
- 4a) Of the above claim(s) 79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.55-61 and 78-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This action is responsive to the amendment and restriction response dated 4/1/2010 as well as the amendment and remarks dated 11/3/2009.
2. Applicant has elected to prosecute the claims of Group A, consisting of claims 1, 55-61, and 78-80. The applicant has cancelled the remaining claims in the amendment dated 4/1/2010.
3. The applicant has further elected Species A, as depicted in figures 3-8. Applicants have submitted in the correspondence on 4/1/2010 that each of the pending claims reads on the elected embodiment. However, claim 79 requires the waste ball valve assembly driving the water valve as described in the non-elected Species B. Thus, Claim 79 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/1/2010.

### ***Claim Objections***

4. Claims 1, 55-61, 78, and 80 are objected to because of the following informalities: Claim 1 line 11 should read --wherein the common actuator is-- instead of "wherein common actuator is connected to". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 55-61, and 78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 lines 11-16 render the claim indefinite. The language used makes it unclear as to the relation between the common actuator, water valve assembly, and waste valve assembly. For example, lines 14-16 currently read "and the water valve assembly and movement of the one of the waste ball valve assembly and water valve assembly resultantly drives the other of the waste ball valve assembly and the water valve assembly". Clarification of the language in claim 1 lines 11-16 is required.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 55, 57-59, 78, and 80 are are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 3,308,481 to O'Brien et al. (O'Brien) in view of USPN 3,599,248 to Fulton.

10. Regarding Claims 1 and 57, O'Brien teaches a flush toilet comprising a bowl assembly (see figure 1) defining a bowl 10 and a discharge opening at a lower end of the bowl (see cutout figure 2). A waste valve assembly (shown generally at 70) mounted to the flush toilet, a water valve assembly 58 including a water valve operable in a water valve open condition and a water valve closed condition (see operation in col

5 and 6), and a common actuator/foot actuated lever 72 are provided as claimed. The common actuator is connected to the water valve assembly and the waste ball valve assembly is coupled to the water valve assembly such that the common actuator drives the water valve assembly and movement of the water valve assembly resultantly drives the waste ball valve assembly.

O'Brien fails to show the waste valve being a ball valve, instead O'Brien uses a pop-up waste valve.

Fulton teaches the use of a ball valve as the flushing valve in a similar toilet assembly. Fulton teaches the use of a ball valve results in a sealed engagement, Thereby preventing leakage of fluid. See column 1 lines 21-38.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of O'Brien by using a ball valve as the flush valve instead of the pop-up valve to prevent leaking of fluid by creating a proper seal between waste valve and discharge opening as evidenced by Fulton.

All functional implications have been fully considered but do not appear to impose any patentably distinguishing structure over that disclosed by O'Brien as modified above.

11. Regarding claims 55, 58, and 78, as previously discussed in pp-10 above, further the waste ball valve is rotatably mounted to the flush toilet, as is the well known arrangement in the art and also shown in Fulton. The actuator is positioned proximate a front portion of the flush toilet and the water valve assembly is positioned proximate a rear portion of the flush toilet, see figures 1 and 3. The common actuator is connected

to the water valve assembly and the water valve assembly is connected to the waste ball valve assembly as claimed.

12. Regarding Claim 80, O'Brien as modified in pp-10 above teaches a flush toilet comprising a bowl assembly defining a bowl 10 and having a discharge opening at a lower end of the bowl (see figure 2), a waste ball valve assembly (as taught by Fulton) moveable between a waste valve open position for opening the discharge opening and a waste valve closed position for closing the discharge opening (as taught by Fulton, and well known in the art as the normal function of a ball valve), a water valve assembly 58, and a common actuator 72. The waste valve assembly includes a ball valve interconnected to the toilet for rotation about a fixed pivot axis (as taught by Fulton), and the ball valve is positioned 'proximate' to the water valve assembly, and interconnected to the water valve assembly such that driven motion to operate the waste valve assembly imparted by the common actuator in turn drives the waste valve assembly.

13. Regarding Claim 59, as previously discussed in pp-10 above, the actuator is mounted to the flush toilet for rotation about a first axis, and the waste ball valve assembly is mounted to the flush toilet for rotation about a second axis. It would have been further obvious to one having ordinary skill in the art to have arranged the waste ball valve and actuator such that the first axis is substantially perpendicular to the second axis as a design choice. This arrangement is perfectly capable of performing the claimed function and could be required by the size and shape constraints of a particular toilet arrangement.

14. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien and Fulton as applied to claim 1 above, and further in view of USPN 5,060,320 to Sargent et al. (Sargent).

15. As previously discussed in pp-10 above, further O'Brien fails to show the actuator interconnected to the waste ball valve assembly and the water valve assembly by a flexible cable.

Sargent teaches that flexible cables (122, 124) used to interconnect actuators (110, 112) to valves (64, 66). Sargent teaches the use of these flexible cables provides fail safe operating means as the wires will close the toilet bowl outlet and water flow control valves in the event that the standard closure means fail.

16. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have connected the actuator to the waste ball valve assembly and the water valve assembly by a flexible cable to provide fail safe operating means as taught by Sargent.

***Allowable Subject Matter***

17. Claims 60-61 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter: Regarding Claim 60, the limitation of the flexible cable being attached to a water valve drive arm for driving the water valve assembly between the open and

closed conditions in combination with the other elements of the claim was not found.

Further, Claim 61 is dependent on Claim 60.

***Response to Arguments***

19. Applicant's arguments, see remarks, filed 11/3/2009, with respect to the prior objection to the Oath/Declaration have been fully considered and are persuasive. The objection of the oath/declaration has been withdrawn.

20. Applicant's cancellation of claim 67 and amendments to the drawings have rendered the prior objection to the drawings moot. The objection to the drawings has been withdrawn.

21. Applicant's amendments to the specification have overcome the prior objection to the specification. The objection to the specification has been withdrawn. Similarly, the applicant has amended claim 61 to overcome the claim objection. The claim is now in proper idiomatic English, and thus the claim objection of claim 61 has been withdrawn.

22. Applicant has amended claims 60-61 to provide proper antecedent basis for the claim language. Thus, the prior rejection of claims 60-61 under 35 U.S.C. 112, second paragraph, has been withdrawn.

23. Applicant's arguments with respect to the prior rejection under 35 U.S.C. 102 and 103 of claims 1, 55-71 discussed on pages 15-18 have been considered but are moot in view of the new ground(s) of rejection.

24. The examiner would like to thank the applicant for their careful amendments and thoughtful remarks.



***Conclusion***

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **KAREN YOUNKINS** whose telephone number is (571)270-7417. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. Y./  
Examiner, Art Unit 3751

/Gregory L. Huson/  
Supervisory Patent Examiner, Art Unit 3751